

**Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal**

Section 1. General administrative information

**Restor/Enhance Trout Creek @ Willowdale
1999 Funding**

Bonneville project number, if an ongoing project 9006

Business name of agency, institution or organization requesting funding
Jefferson County Soil & Water Conservation District for Trout Creek Watershed Councilt

Business acronym (if appropriate) JCSWCD

Proposal contact person or principal investigator:

Name Marie Horn
Mailing Address 243 SW 3rd St
City, ST Zip Madras, Or 97741
Phone (541)475-3144
Fax (541)475-6793
Email address

Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name

NPPC Program Measure Number(s) which this project addresses.

Section 7 7.6, 7.7

NMFS Biological Opinion Number(s) which this project addresses.

Other planning document references.

Wy Kan Ush Me Wa Kush Wit , Trout Creek Assessment, Memorandums of Agreement:
Natural Resources Conservation Service , Oregon Dept. of F&W
Landowners,landmangers in Trout Creek

Subbasin.Trout Creek Watershed

Short description.Replace push-up dams, Stabilize Streambanks, Improve water quality/quantity

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish	X	Construction	X	Watershed
+	Resident fish		O & M		Biodiversity/genetics
+	Wildlife		Production		Population dynamics
	Oceans/estuaries		Research		Ecosystems
	Climate		Monitoring/eval.		Flow/survival
	Other	+	Resource mgmt		Fish disease
		+	Planning/admin.		Supplementation
			Enforcement	+	Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords.Steelhead , a candidate species for listing on the ESA

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
-9366	NE Or. Screens/Passage	Trout Creek Watershed plan
940200	T.C. Habitat Restoration	Trout Creek Watershed plan
9303000	Buckhollow W.Enhancement	Basin plan
9405400	Bull Trout Studies C/NE Org.	Stock status

Section 4. Objectives, tasks and schedules***Objectives and tasks***

Obj 1,2,3	Objective	Task a,b,c	Task
1	decrease sedimentation	a	stabilize stream banks
2	Increase riparian vegetation	b	willow & native vegetation
3	Consolidate irrigation push-up dams	c	Consolidate four push-dams into one diversion dam
		d	

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Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	5/1998	4/1999	10.00%
2	5/1998	4/1999	5.00%
3	5/1998	4/1999	85.00%
			TOTAL 100.00%

Schedule constraints.

None foreseen

Completion date.

1999

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel	Project Manager	\$4,800
Fringe benefits		
Supplies, materials, non-expendable property		
Operations & maintenance		
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel	Project manager	\$1,200
Indirect costs	clerical support: telephone, copying, postage, film/developing	\$2,400
Subcontracts	Construction of Cement diversion dam	\$75,000
Other		
TOTAL		\$83,400

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget				
O&M as % of total				

Section 6. Abstract

The Trout Creek Watershed Council is developing a long range plan to reduce sedimentation, reduce temperature and increase water quantity and quality. This will be accomplished by riparian restoration projects and working with private landowners to improve livestock management and reduce the impact on riparian vegetation.

Push-up dams will be consolidated by construction of a cement diversion dams and adding pipe to carry to fields. Bank stabilization will be done by using bank sloping, juniper and rock riprap where feasible. Vegetation, utilizing willow plantings, and native plants, will be used to stabilize and enhance streambanks. The improvements will be decreased sedimentation due to the use of push-up dams, improved water quantity and quality, enhanced steelhead and redband trout habitat. The project is expected to be completed in May 1999.

The Trout Creek Council, JCSWCD and Oregon Dept. of Fish and Wildlife along with private landowners/landmanagers will be responsible for monitoring and evaluating the project. Funds will be solicited for monitoring and data recording.

Section 7. Project description

a. Technical and/or scientific background.

Trout Creek has a history of flashiness that leaves damaged riparian areas in its wake. The flashiness has resulted from timber harvest practices, erosion in the headwaters, degraded riparian areas and juniper encroachment in the uplands. After the 1964 flood, the Corps of Engineers placed berms in Trout Creek. There have been resultant consequences from the berms washing out and eroding. The Corps has been contacted to participate in the restoration efforts in Trout Creek. The goal of the Watershed Council and JCSWCD is to restore and revegetate the riparian areas to develop a proper functioning watershed, with retention of water being released slowly over a period of time. Local landowners are interested in replacing push-dams with diversions that carry water to the fields by pipe. The restoration goals are to stabilize streambanks and revegetate the areas with native plants. The Watershed Council is working with local landowners/landmanagers to improve livestock management practices to eliminate impact on riparian vegetation. The Oregon Dept. of F&W has worked extensively in the Trout Creek area to restore and enhance steelhead and redband trout habitat and increase production of same.

Jefferson County SWCD has a published Trout Creek Watershed Resources Inventory and Problem Assessment. In 1984 the Dept. of F&W and twenty-one landowners, with funding from BPA did a project that included 140 miles of livestock fencing, 750 cu. yds of spawning gravel, 4,956 instream structures, 21,000 ft. of juniper riprap, 10 off-stream livestock water developments, 17 irrigation-pump fish screens and 13 rotary fish screens for irrigation diversion ditches. Funding from the Governors Watershed Enhancement Board (GWEB), Bureau of Reclamation and Corps of Engineers is also being sought for this project. The Bureau of Reclamation (BOR) funded an on-site evaluation of projects needed and the results will be forthcoming. The evaluation will be used by the Watershed Council to develop a priority list. The Watershed Council is developing a Long Range Plan and an Action Plan using these assessments, evaluations and studies to address uplands, riparian, grazing and timber issues in the watershed. The positive benefits of this restoration will be to decrease sedimentation and temperature. It will increase the fish spawning and rearing habitat for steelhead.

b. Proposal objectives.

1. The proposed objective is to reduce sedimentation:

- a. Bank stabilization will decrease sedimentation and improve fish spawning and rearing grounds.**

3. The proposed objective is to increase vegetation:

- a. Plant willows (a native to Trout Creek) and vegetation**
- b. Bank stabilization structures will be placed to capture sedimentation that will increase the growth and stability of the vegetation and build up banks.**

3. The proposed objective is to decrease the number of push-dams being used in Trout Creek.

- a. Consolidation of dams into a single cement diversion**
- b. Increase water that will remain in the stream**

c. Rationale and significance to Regional Programs.

The Trout Creek Watershed is part of the Middle Deschutes drainage in the Deschutes Basin. There is a Deschutes Basin group that the watershed Councils and JC SWCD participates in. The goal of these groups are to have a Basin wide approach to watershed health.

d. Project history

N/A

e. Methods.

The projects in Trout Creek will be coordinated efforts to bring a continuity to restored/enhanced sections in the riparian areas. BPA has invested funding for previous projects for fencing, streambank stabilization and vegetation. The proposed project will add one fourth of a mile to this continuity. The landowner is interested in consolidation of four push-up dams into a single cement diversion with water being gravity fed to the fields. The site will also address a highly eroded bank and the proposal will also allow for reshaping the bank with material found at the site and to utilize willows to stabilize the bank. The bank will be reshaped, replanted, keeping in mind the natural meander of the creek. The Dept. of F&W is working with the Council for placement, design and critical timing for fish protection. The Bureau of Reclamation finished an on-site evaluation of some of the major concerns of the landowners.

The critical assumptions are that with this restoration effort, water will be saved and will remain in the creek due to less being used in the fields, less sedimentation will occur if the stream is not disturbed for push-up dams. Therefore sedimentation will be reduced, fish habitat will improve and water temperature will decrease. Landowners, ODFW, Trout Creek Watershed Council and Jefferson County Soil and Water Conservation District will be responsible for monitoring and evaluating the results. The method will be used in other areas of the watershed if successful. Results from projects in the Trout Creek Watershed will be gathered and compiled into a usable data base.

f. Facilities and equipment.

The project will be facilitated and administered by the Jefferson County Soil & Water Conservation District and will furnish space/computer use and clerical assistance to the project manager.

Major equipment for excavating and cement construction will be sub-contracted. Madras High Forestry and Vo-Ag classes and Middle School students will be contacted for volunteers to assist with the vegetative plantings. Corps may furnish equipment for any of the project that will involve the Corps.

g. References.

Section 8. Relationships to other projects

In 1985 BPA funded a project in Trout Creek through the Oregon Dept. of Fish & Wildlife for riparian restoration/enhancement. The ODFW has continued to enhance this project with Access & Habitat (A&H) and Restoration and Enhancement (R&E) program funds.

The Corps of Engineers has been contacted concerning the erosion and washout of berms they placed in Trout Creek in 1965.

Private land owners and land managers are working with and serve on the Board of Directors of the Trout Creek Watershed Council. This Watershed Council is developing an Action Plan to address all *issues of concern* found in the watershed. Natural Resources Conservation Service is developing new or up-dated resource management plans that will identify concerns for the “Environmental Quality Incentive Program” (EQIP) for landowners in Trout Creek. The JCSWCD has hired a resource management planner for additional resource management plans. Once these plans are developed they will be used as a basis to implement projects in the watershed that will compliment each other for a whole-watershed health approach.

Ochoco Lumber and other private timber managers are working with the Watershed Council to address timber harvest management plans. US Forest Service, Oregon Dept of Forestry and ODFW serves as an advisor to the Council. Members of the Council are also members of the Cattleman’s Association and will advise on livestock management concerns.

The Watershed Council, along with the JCSWCD will act as a catalyst to bring together concerned landowners/landmanagers and agencies to work towards building Trout Creek into a proper functioning condition watershed with economic benefits to landowners, landmanagers, with improved habitat for fish/wildlife.

Section 9. Key personnel

Project Manager:

Marie Horn, *Watershed Coordinator*.

Marie also works as an *Office Manager* for the JCSWCD.

Current responsibilities are to administer all funding, record keeping, payroll, grant applications and reports due, for project updates and completion.

She works as Office Manager and Watershed Coordinator until a full-time Coordinator will be needed.

Marie is hired and supervised by the Jefferson County SWCD and gets daily direction and supervision from the Resource Conservationist of Natural Resource Conservation Service.

Marie will work closely with Tom Nelson, ODFW (Trout Creek Project), who has extensive experience with fish & wildlife projects in Jefferson County.

Marie works with the Trout Creek Watershed Council to develop priority areas and Action Plans to address the concerns unique to Trout Creek.

Marie has 25 years experience.

As a Watershed Coordinator she has contact and shares information with various agencies, other Watershed Coordinators, ODFW, NRCS, ODA, Oregon Trout, and agencies/organizations concerned with conservation efforts in watersheds.

As a Watershed Coordinator and SWCD Office Manager, Marie has access to information, project types and results of watershed restoration efforts on-going in BuckHollow by Ron Graves. The efforts being made there are the desires by the Trout Creek watershed Council to immutate for Trout Creek.

Section 10. Information/technology transfer

Information will be shared by promoting the efforts of Watershed Council in Jefferson County. Public tours of projects will be scheduled. The OSU Extension Service has an educational project that will teach school age children and young adults about watershed projects and keeping watersheds healthy. JCSWCD will coordinate public tours with this educational outreach project.

The Watershed Coordinator shares and gathers information among Watershed Councils and Coordinators. Public news items on projects will be published. Workshops for the public, landowners and agencies will be developed that will teach and show a Proper Functioning Condition (PFC) watershed. All of the proposed projects will be working towards this goal.